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PACIFIC ⊠ TELESIS
Group-Washington

January 9, 1997

EX PARTE OR LATE FILED

EX PARTE

William F. Caton
Acting Secretary
Federal Communications Commission
Mail Stop 1170
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Dear Mr. Caton:

Re: *CC Docket Nos. 95-116*

Today representatives of Bell Atlantic and Pacific Telesis made <u>Ex Parte</u> contacts in the above referenced proceeding to discuss the attached material. Participating for Bell Atlantic were John Seazholtz (Chief Technology Officer) and Patricia Koch (Assistant Vice President - Regulatory Relations) and participating for Pacific were Ross Ireland (Vice President - Network Engineering for Pacific Bell) and myself. Meetings were held with:
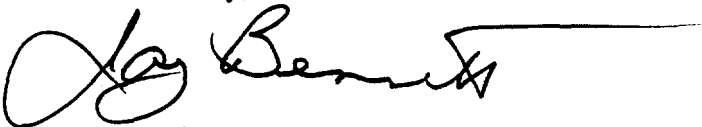
  - Commissioner Susan Ness and Jim Casserly - Senior Legal Advisor, and
  - Dan Gonzalez - Legal Advisor

In discussing the attached material, we discribed the advantages of allowing LECs the option of utilizing LRN with QoR to implement Local Number Portability.

We are submitting two copies of this notice in accordance with Section 1.1206(a)(1) of the Commission's rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions.

Sincerely,

Attachment

cc: Commissioner Ness, Jim Casserly, Dan Gonzalez

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List ABCDE

Why We Need LRN With QoR

Introduction

- Why is our request urgent?

- Difference between LRN and LRN with QoR

LRN With QoR Dramatically Reduces Costs

- Number portability implementation is very expensive

- LRN requires network to be overbuilt on Day 1
  - does not permit "ramp up"

- LRN with QoR permits costs to be incurred in proportion to porting increases

- LRN with QoR saves several hundred million dollars nationwide
  - Net of QoR software costs

LRN With QoR Reduces Risk Of Service Impairment

- With LRN Data Base look-up required for all interswitch calls on Day 1
  - Less than 1% of these calls require a Data Base look-up today

- LRN with QoR only requires a database look-up for ported numbers
  - Provides a graceful transition to Local Number Portability

- LRN with QoR permits problems to be isolated more quickly than with LRN, preventing network failure propagation

- LRN is the largest feature implementation since divestiture
  - very aggressive implementation timing

SS7 Utilization

*Not Engineered Load
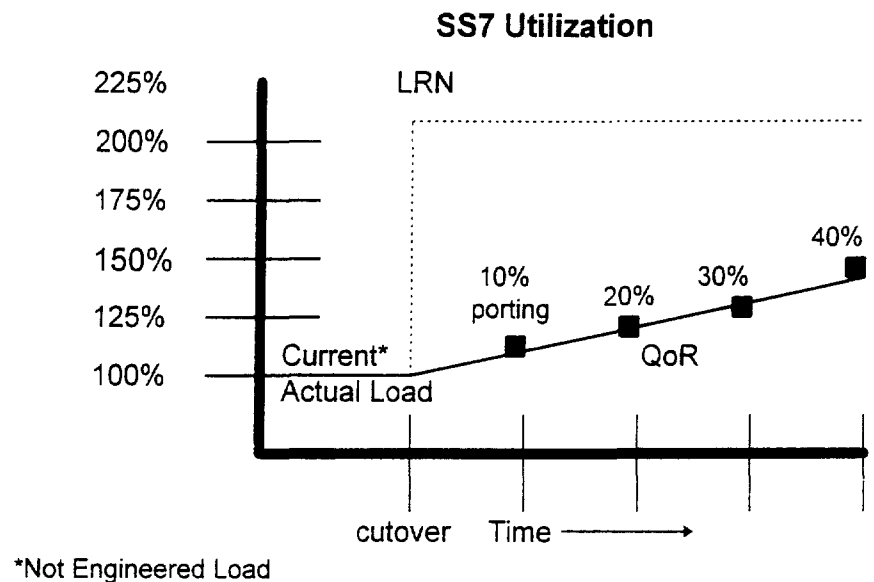
Objections By Opponents

- AT&T claims that LRN with QoR will use capacity . . . fueling the need to upgrade to accommodate Internet traffic growth

    - LRN requires dramatic capacity increases and upgrades
        - over 200% increase in SS7 signalling traffic
        - requires switch processor upgrades
        - requires significant increase in number of databases

    - Capacity for LRN with QoR already exists in network

   - Signalling network unaffected by longer Internet calls

Our Cost Assumptions
Are Proper

- IECs claim we wrongly included their traffic volumes

    - reasonable to include these volumes because <u>Order</u> doesn't require IECs to meet schedule

    - for example, even if volumes are excluded, cost savings are between $106-112M for Pacific Bell (versus range of $106-130M if IEC traffic volumes included)

- IECs claim we used too strict engineering standard (.3 erlangs)

    - this is the same standard Pacific Bell uses for all current STP-ISCP traffic, not just for number portability

    - AT&T has agreed to this standard in meetings with Pacific Bell

Our Cost Assumptions
Are Proper
(cont'd)

AT&T claims that cost analysis did not account for LRN with QoR trunking and switching costs. This is simply not true. Trunking costs were not included because they are insignificant as shown below.

Example: 10% of calls from A are sent to B. A serves 30,000 access lines. Trunk group between A and B can handle 3000 calls/hour. 1 originating call per line in busy hour. Hold time = 180 seconds. QoR reserves a trunk for .3 seconds.

$$\widehat{A}\!\!-\!\!-\!\!-\!\!\widehat{B}$$
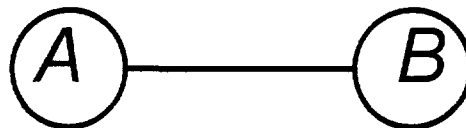
At 20% ported (600 QoR call attempts each at .3 seconds = 180 seconds in busy hour).

Summary:
For this example at 20% porting there is a .03% traffic increase which equates to 1 call in the busy hour. This increase due to LRN with QoR requires no additional trunks.

Our Cost Assumptions Are Proper
(cont'd)

- AT&T states that LRN does not require provisioning in intermediate switches. This is not true.

  - If ILECs do not provision tandems then calls that are sent to the tandems unqueried (wireless, IEC traffic during transition, etc.) will result in call processing delays. AT&T has objected to such post dial delays.

- AT&T claims the LRN with QoR cost of provisioning in originating, intermediate and terminating switches will be higher than with LRN alone. That is simply not true.

  - LRN with QoR triggers will be provisioned once without fear of processor overloads because query volumes would be extremely low.

  - LRN triggers will be provisioned multiple times due to concerns of overloading switch processors, SCPs and the signaling network.

Our Cost Assumptions
Are Proper
(cont'd)

AT&T claims that cost analysis did not account for LRN with QoR switching.

The three major areas that contribute to the cost savings between LRN and LRN with QoR are

- LRN SCP costs
- Switch processor growth
- SS7 network growth

AT&T has presented no information that changes the query volumes that drive LRN SCP costs and SS7 growth. With regard to switch processing:

- Varies by switch type

- Average crossover (LRN with QoR to LRN) is at approximately 50% porting

LRN With QoR To LRN Only Crossover Point

- SCP -- Transaction load always less with LRN with QoR
  - not a factor

- SS7 signalling traffic -- LRN with QoR = LRN only at greater than 60% ported numbers to a carriers with their own switch

- Switch Processing
  - Varies by switch type
  - Average crossover at approximately 50% porting to carriers with their own switch

- LRN with QoR uses existing capacity

Objections By Opponents

- POST DIAL DELAY

    - imperceptible
        - large variance today
        - delay present with LRN with or without QoR
        - less than 1/2 second difference between LRN with QoR over LRN

    - only affects incumbent carriers' originating callers
        - not ported customer

- Teleport supports LRN with QoR

Objections By Opponents
(cont'd)

- RELIANCE ON INCUMBENTS' NETWORK

  - LRN with QoR implementation should be voluntary
    - can choose LRN or LRN with QoR

  - Within the same switch, the incumbent LEC handles calls the same way with either LRN or LRN with QoR

  - Both LRN and LRN with QoR treat ported and nonported numbers differently

    - LRN does a look-ahead function within the originating switch. If the number is on the switch, it completes. If the number has been ported, a query is generated.

    - LRN with QoR does a look-ahead function on all calls. If the number is on the switch, it completes. Otherwise, a query is generated.

Summary

- LRN with QoR provides substantial initial cost savings

- LRN with QoR reduces risk to SS7 network

- Post Dial Delay - imperceptible and does not affect competitors' customers

- Network Reliance - required with both LRN with QoR and LRN

FCC should allow the use of LRN with QoR for Local Number Portability Implementation.

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